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## Some Architectural Traits of the Western Gnatcatcher

(*Poliophtila cærulea obscura*.)

BY CORYDON CHAMBERLIN, VALLECITO, CALIF.

*With sketches from nature by the author.*

THE few observations on *Poliophtila c. obscura* here recorded cannot do justice to this very interesting subject and are offered only in lieu of a more complete study. Of all the birds it has been my lot to make unhappy, I cannot think of any one whose good qualities have appealed to me more strongly than the Western Gnatcatcher. He is the embodiment of many good characteristics; whenever seen he is a delight to the eye and his note, if not musical, is unique and unmistakable and you may be sure of him whenever you hear it.

On his arrival in this latitude, near the first of April, he adds new life to the woods and his *tease, tease-e* may be heard incessantly on every hand. When he first appears in his trim "tailor-made" suit of black, white and gray he seems at once the very personification of dandyism and well-bred modesty, but no one can accuse him of vanity for he forgets his appearance entirely in the pursuit of work as he is a model of industry.

Mr. Gnatcatcher is thoroughly domestic in his nature and usually establishes two homes each breeding season. How many fake nests he builds or how many of his pretty houses are robbed or torn up by his enemies I cannot tell. It is as an architect principally that I wish to dwell on the gnatcatcher and will return to this part of the subject further on.

The name *gnatcatcher* is misleading as regards the diet of this species, for I have repeatedly seen one tackle a butterfly almost as large as himself and bag his game, too. I think however his food is largely made up of the eggs and larvae of insects which are found on the under-side of leaves and in the crevices of bark. I have also seen him feed on small flying insects which may have been gnats or mosquitoes.

The bluejay is strongly in evidence as an enemy of the gnatcatcher and loves to tear the half-finished nest from its foundation and sit in the top of the tree with it sticking out on the sides of his bill like bunches of gray whiskers. The gnatcatchers usually resent such intrusion, and worry the jay until he drops the nest or flies away with a harsh mocking cry. I have known a pair of gnatcatchers to chase a jay from tree to tree until he was a safe distance from their nest when they would suddenly disappear to be found half an hour later in their own tree resting and scolding softly.

An unaccountable habit which this species has is that of congregating in flocks and flying from tree to tree with much noise and fluttering. I cannot imagine anything but a free-for-all cake walk that can be compared to this gregarious movement. I have often thought at such times that they were driving bluejays away for I have always seen jays flying about noiselessly on such occasions but I cannot with certainty give the cause of such assemblages, for they usually broke up when I approached the center of disturbance. It may however have been merely a choir practice or some social function,—who knows?

During the spring of '95 I first became acquainted with the Western Gnatcatcher near Lakeport, Lake Co., this state. In the latter part of April I observed them building their nests. All of the first nests I found were in small white oak trees from six to ten feet from the ground. Of the first few nests I saw being built none were finally occupied on their original site. One pair near my camping place moved their nest and made it over three times before being satisfied to deposit eggs in it. Each time that the nest was nearly complete, the birds would discover a



*Drawn from nature by C. Chamberlin.*

ODD NESTING SITES OF THE WESTERN GNATCATCHER.

1. Nest 30 feet up on pine cone.
2. Nest 7 feet up on horizontal oak limb.
3. Nest 30 feet up in crotch of alder.

more suitable site and then the work of tearing down would begin and it would be moved piece-meal to the new place and until scarcely a vestige of the nest remained in the old location. The third and final resting place for this nest was in the main crotch of a small white oak bush at such a height that I could just reach the nest by standing on tip toe. The eggs, four in number, were deposited in May and I soon after gave the birds a chance to build another nest, which chance they availed themselves of, for they reared a brood that season in June, while they probably gave the jays credit for the robbery.

The nest was built of exceedingly fine and soft material, a few small feathers being the coarsest stuff used. Very thin strips of vegetable vellum and rotten bark fibres made up the bulk of the nest. The edges at the top were drawn in, making the diameter of the opening less than that of the center of the cavity—the cavity being deep and snug-looking. The outside of the nest was laced over with cobwebs and spangled with lichens from the oaks which were bound on with webs also. The selection of lichens varied considerably with the pairs of birds, some choosing dark brown ones with black backs which gave the nest a rich but subdued cast while other nests were paler or brighter owing to the use of lighter-colored lichens—the usual kind being pale green or silver gray in color.

Most of the nests I found in Lake Co. were in small scrub oaks, but two were taken from large limbs of fair-sized oak trees. May seems to be the best time for collecting nests in this locality. During the spring of '97 I found the Western Gnatcatcher very abundant in Tuolumne and Calaveras counties but saw none above 3500 feet elevation.

Near Stent in Tuolumne Co., I secured nests in oaks, pines and one in an alder tree. My experience here destroyed all the imaginary limits I had placed on the nesting sites of this species, for I found nests in many kinds

of trees, on the ends of horizontal limbs, at the base of limbs, in large and small crotches, and at heights varying from five to fifty feet from the ground. Most of the records of sets are for May. One nest was in the main crotch of an alder tree 30 feet from the ground, the tree being in a creek bed. This is the only record I have of a nest near water and I made a sketch of it as being a rather unusual site. Another rather pretty but quite typical nest was saddled to a small horizontal oak limb about six feet above the ground. It was made in between the stub of a small twig and a live twig carrying a bunch of leaves that hung over the nest like a parasol.

Perhaps the most unique nesting site ever seen of this species was the top of a pine cone in a sprawling bull pine. The cone was on a lonely limb fully thirty feet above the ground at the butt of the tree, but as the tree hung over a gully the nest was double that distance vertically from the ground. I made rough note-book sketches of several of these nests which I finished up at home.

During May 1900, while working in connection with the Duchess mine in Calaveras Co., I found a nest with half-grown young of this species in a live oak that had been killed by fire, as had all the trees on that mountain side. The nest was about 15 feet up in a crotch of one of the limbs and the young left it about the last of May. On June 7 I took a nest and five fresh eggs from, I think, this same pair in a location quite similar to the first and about 50 feet away from it. These two nests are the first I have ever seen that were devoid of lichens. On account of the fire all timber was dead and there were no lichens. The nests however were decorated with bits of burnt bark which made a rather poor substitute for the usual decoration, as far as looks go.

I think this circumstance of covering the nest with material similar in color to the tree in which the nest is situated is a means of protection rather than

decoration. In this latter case the tree was charred to quite an extent and the nest was very similar in appearance to the limb on which it was built. Nests are very difficult to see unless the bird is watched as he carries material and deposits it on the nest. Both male and female do the work of building. Of all the nests I have observed, four seems to be more common than five as a set of eggs, though five is not at all unusual.

The variation in eggs lies principally in the ground color, some sets being much paler than others. Rather than take up time here in giving a detailed description of bird and eggs I refer to Coues or Ridgway, especially since I have limited myself to nests in this article, and have made little attempt to cover other phases on the subject.



### A Word in Behalf of the Boy.

I have recently been impressed with certain expressions occurring in the writings of prominent ornithologists concerning the relation of the downy young of the genus *Homo* to the nests and eggs and downy young of our feathered friends. Two facts are self-evident: "Boys will be boys; all men were boys once." You may elaborate as much as you please on these two points, but do not forget to ask yourself how much you owe these same boys in the way of instruction and enlightenment and then ask how much you have done for their elevation into and encouragement in right ways of thought and action.

Next to *men* who collect birds' skins and eggs for sale, boys are probably the birds' worst enemies. But do not blame the boys until you have heard their case and have done your *duty* by them. Most children receive no instruction at home in the study of the animal kingdom and very little in the common school, both on account of the lack of time and incompetency of the instructors. I am not now placing blame upon

the parents or teachers; neither do I seek to excuse the shocking cruelty of boys I have known; but I simply state what seems to me to be true.

A boy stands accused of wantonly robbing and destroying a bird's nest or of trying to collect more eggs than any other. Who will cast the first stone at him? Don't throw any stones but take the boy to your home, show him your collection of nests and eggs, explaining many things which, up to this time, he has had no opportunity to learn, because he has been considered an outlaw and no one has taken enough interest in him to speak kindly to him and ask where he lived etc. Make him feel that he is at least as important as a bluejay or an English Sparrow. Open your insect cabinet and show him the difference between a bee and a fly—between a bug and a beetle. If he asks a question answer him fully and respectfully. Shake hands with him, bid him goodbye and tell him that if he will be on hand next Saturday morning at 8:30 o'clock, you'll take him on a collecting trip with you. And don't forget to put in lunch enough for two.

In short,—stoop to entertain a thoughtless, careless boy, for *any* boy is of more value than many sparrows. If you really wish to see the birds protected, make friends with the boys and seek their cooperation for they can help more than you think. For nearly two years I have conducted a "natural history class" in my home and have been greatly pleased with the results. We meet on Tuesday and Thursday evenings of each week and go afield whenever the opportunity offers. Several of my class have mastered the work outlined with most commendable thoroughness and alacrity. Thus I have directly influenced the boys and girls to a greater or less extent. Why cannot a hundred other members of the Cooper Ornithological Club do as much or more? Wouldn't the birds be glad?

F. C. CLARK.

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